

Appl. No. 09/976,166
Amdt. Dated August 10, 2005
Reply to Office action of July 26, 2005

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the applications:

Listing of Claims

Claims 1 and 2 (canceled)

Claim 3 (original) A method for synchronizing corresponding streams of packets sent to a mobile station from two different base stations, each of the packets having a corresponding sequence number, the method comprising

generating a stream of link layer frames by each of the base stations wherein each of the frames is of the same length,

in each of the base stations filling in the frames with the packets starting with the same one of the packets,

transmitting fully filled-in frames from each of the base stations to the mobile station,

detecting two stream of frames at the mobile station wherein one of the streams is transmitted by the first of the base stations and another of the streams is transmitted by the second of the base stations,

determining the packet sequence number of reach of the packets in each of the streams, and

initiating a resynchronization procedure whenever packets in one or both of the steams do not have packet sequence numbers that are consecutive.

Claim 4 (original) The method as recited in claim 3 wherein the first of the base stations receives packets k and m but no packets between k and m, $m > k$, and wherein the initiating a resynchronization procedure includes

sending a request from the first of the base stations to the second of the base stations to restart synchronization from packet q, $q > m$, and

transmitting packet q from both of the base stations to the mobile station in the q-th one of the frames.

Claim 5 (original) The method as recited in claim 3 wherein the first of the base stations receives packets k and m but no packets between k and m, $m > k$, and wherein the initiating a resynchronization procedure includes

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sending a request from the first of the base stations to the second of the base stations to restart synchronization from packet q , $q > m$,

sending by the first of the stations all packets received before packet q and preparing for delivery of packets greater than or equal q ,

upon receiving the request from the first of the base stations, sending an acknowledgement from the second of the base stations to the first of the base stations that resynchronization can be accommodated by the second of the base stations starting with packet q ,

sending by the second of the base stations all packets received before packet q and preparing for delivery of packets greater than or equal q , and

transmitting packet q from both of the base stations to the mobile station in the q -th one of the frames.

Claim 6 (currently amended) The method as recited in claim 3 wherein the first of the base stations receives packets k and m but no packets between k and m , $m > k$, and wherein the initiating a resynchronization procedure includes

sending a request from the first of the base stations to the second of the base stations to restart synchronization from packet q , $q > m$,

sending by the first of the base stations all packets received before packet q and preparing for delivery of packets greater than or equal q ,

upon receiving the request from the first of the base stations, sending an a response from the second of the base stations to the first of the base stations that resynchronization can be accommodated by the second of the base stations only starting with packet $r > q$,

sending by the second of the base stations all packets received before r and preparing for delivery of packets greater than or equal r , and

transmitting packet r from both of the base stations to the mobile station in the r -th one of the frames.

Claims 7 - 9 (canceled)

Claim 10 (currently amended) The A method of claim 7 for transmitting data from a base station, said method comprising the steps of:

generating layer-2 frames of the same length:

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filling each of said generated frames with data blocks received from a layer above layer-2;

transmitting only said fully filled frames, unless

a time expires, or

instructions are received from the layer above layer-2 to transmit the frame currently being filled;

receiving at the base station a first block, k, and a second block, m,

losing data content synchronization between blocks k and m; and

based on said loss of data content synchronization sending a request from the base station to at least one other base station to initiate resynchronization of data transmission beginning from a third data block, q, where $q > m$.

Claim 11 (currently amended) The method of claim 10, wherein data transmission resynchronization at the base station comprises the steps of:

immediately transmitting all data blocks received before data block q from the base station;

receiving acknowledgement from at least one other base station responsive to said sent request ; ~~and~~

responsive to said acknowledgement filling each of said generated frames beginning with data block q and all data blocks received thereafter from a layer above layer-1; and

transmitting only said fully filled frames, unless a time expires, or instructions are received from the layer above layer-2 to transmit the frame currently being filled.

Claim 12 (original) The method of claim 11, wherein said loss of data content synchronization is because of a data gap between data blocks k and m.

Claim 13 (original) The method of claim 12, further comprising the steps of numbering each data block and incrementing each data block number by a count of one each time a data block is transmitted.

Claim 14 (original) The method of claim 11, wherein layer-2 is the link layer protocol that is executed on a radio interface of the base station.

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Claim 15 (original) The method of claim 14, wherein the layer above the link layer is network layer executing an IP layer protocol and the data blocks are comprised of IP packets.

Claims 16-18 (canceled)